Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently Amended): ~~Process~~ A process for non-coherent reception of a signal with spectrum spreading and DP (Differential Phase)-MOK (M-Ary Orthogonal Keying) mixed modulation ~~with combination of~~over multiple paths, ~~characterized in that it~~ said process comprising~~comprises the following operations~~:

~~A)~~ processing the signal ~~is processed~~ in several M channels in parallel; in each channel, the signal is filtered by a filter adapted to a pseudo-random sequence specific to the channel; ~~the~~ energy of the filtered signal is measured; ~~this~~ said energy of the filtered signal is weighted by a weighting factor; ~~the~~ a channel containing ~~the~~ a weighted signal with ~~the~~ a highest power is determined; ~~the~~ a number of ~~this~~ the highest power channel is decoded to reproduce ~~the~~ first information symbols (~~mMOK~~);

~~B)~~selecting the filtered signal with the highest ~~energy~~ power ~~is selected~~, a differential phase demodulation is made of ~~this~~ said selected filtered signal ~~which produces~~to produce multiple correlation peaks corresponding to multiple paths; ~~the~~ energy of ~~these~~ the multiple correlation peaks is calculated; ~~this~~ said energy of the multiple correlation peaks is weighted by ~~the~~ said weighting factor to provide weighted energy; ~~this~~ said weighted energy is decoded to restore ~~the~~ second information symbols (~~mDP~~); and

~~C)~~determining an ~~the~~ average of the multiple correlation peaks ~~is taken~~ over a determined duration corresponding to several information symbols, ~~this~~ said average forming ~~the~~ said weighting factor ~~acting on the energy of the filtered signal in each channel and on the energy of the correlation peaks~~.

Claim 2 (Currently Amended): ~~Non-coherent~~ A non-coherent receiver for a signal with spectrum spreading and DP-MOK mixed modulation ~~to make use of this process according to claim 1~~, ~~characterized in that it comprises~~comprising:

~~A)~~ several M channels in parallel, each channel comprising a filter ~~(201, ..., 20M)~~ adapted to a pseudo-random sequence specific to the channel; a circuit ~~(211, ..., 21M)~~ for measuring the energy of the filtered signal; a circuit ~~(221, ..., 22M)~~ for weighting ~~this~~ energy by a weighting factor; means ~~(230) of~~ for determining the channel that contains ~~the~~ weighted signal with the highest energy; a MOK decoder ~~(250)~~ receiving the number of ~~this~~ channel, and ~~in response~~ restoring ~~the~~ first information symbols (~~mMOK~~);

~~B)~~ means ~~(240) of~~ for selecting the filtered signal with the highest energy; a differential phase demodulator ~~(260)~~ which produces multiple correlation peaks corresponding to multiple paths; a circuit ~~(130)~~ for weighting the energy of the correlation peaks by the ~~said~~ weighting factor; a PSK decoder ~~(270)~~ restoring ~~the~~ second information symbols (~~mDP~~); and

~~C)~~ means ~~(265) of~~ for calculating the average energy of the correlation peaks over [[a]] the determined duration corresponding to several information symbols, ~~this~~ average forming the ~~said~~ weighting factor, the output of ~~these~~ the means for calculating the average energy ~~means (265)~~ being connected to ~~the~~ weighting circuits ~~(231, ..., 22M)~~ of the ~~various~~ M channels and the circuit ~~(130)~~ for weighting the energy of the correlation peaks.